

## Neuromorphic Robot Dream

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### Abstract

© 2016, Springer Science+Business Media New York. In this paper, we present the next step in our approach to neurobiologically plausible implementation of emotional reactions and behaviors for real-time autonomous robotic systems. The working metaphor we use is the “day” and the “night” phases of mammalian life. During the “day” phase a robotic system stores the inbound information and is controlled by a light-weight rule-based system in real time. In contrast to that, during the “night phase” information that has been stored is transferred to a supercomputing system to update the realistic neural network: emotional and behavioral strategies.

<http://dx.doi.org/10.1007/s12668-016-0323-9>

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### Keywords

Affective computing, Artificial emotions, Robotics, Spiking neural networks

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